11-5-2008

Ex. 280-US-475

Unknown

Stream: SF Sprague River
Site: 655
Date: 9/26/1990
Habitat: Run **Flow:** Low

(1) Level Loop Survey (BM & HP)

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	0.35	100.35		100.00
HP1			0.34	100.01
HP2			0.34	100.01
HP3			0.22	100.13
TP				
HP3	0.71	100.83		
HP2			0.82	100.01
HP1			0.82	100.01
BM			0.83	100.00

Comment:

(2) Water Surface Elevation (WSE) Survey

TR	River Station L/R bank (ft)	River Station Ave (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
1-L	0	0	100.85	9.62	0.00	91.23	91.25	8.1
1-R	0			9.59	0.00	91.26		
2-L	29.9	15	100.85	9.57	0.00	91.28	91.29	8.5
2-R	0			9.55	0.00	91.30		
3-L	88.9	95.3	100.84	9.48	0.00	91.36	91.36	
3-R	101.7			9.48	0.00	91.36		
							Ave Q=	8.3

Note:

WSE slope = 0.121%

(3) Meter and propeller ID for Velocity Correction

Meter ID: NA
Propeller ID: NA

Date: 4/5/1991
Habitat: Run **Flow:** Mid

(1) Level Loop Survey

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	4.77	104.77		100.00
HP1			4.76	100.01
HP2			4.76	100.01
HP3			4.62	100.15
TP				
HP3	4.82	104.97		
HP2			4.95	100.02
HP1			4.95	100.02
BM			4.96	100.01

Comment:

(2) Water Surface Elevation (WSE) Survey

TR	River Station L/R bank (ft)	River Station Ave (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
1-L	0	0	104.97	13.23	0.00	91.74	91.77	47.3
1-R	0			13.17	0.00	91.80		
2-L	29.9	15	104.97	13.20	0.00	91.77	91.78	46.4
2-R	0			13.19	0.00	91.78		
3-L	88.9	95.3	104.97	13.04	0.00	91.93	91.92	43.5
3-R	101.7			13.06	0.00	91.91		
							Ave Q=	45.7

Note:

WSE slope = 0.157%

(3) Meter and propeller ID for Velocity Correction

Meter ID: NA
Propeller ID: NA

Date: 5/18/1993
Habitat: Run **Flow:** High

(1) Level Loop Survey

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	3.62	103.62		100.00
HP1			3.62	100.00
HP2			3.62	100.00
HP3			3.45	100.17
TP				
HP3	4.10	104.27		
HP2			4.25	100.02
HP1			4.25	100.02
BM			4.25	100.02

Comment:

(2) Water Surface Elevation (WSE) Survey

TR	River Station L/R bank (ft)	River Station Ave (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
1-L	0	0	104.27	10.68	0.00	93.59	93.63	
1-R	0			10.60	0.00	93.67		
2-L	29.9	15	104.27	10.49	0.00	93.78	93.76	300.3
2-R	0			10.53	0.00	93.74		
3-L	88.9	95.3	104.27	10.42	0.00	93.85	93.80	
3-R	101.7			10.52	0.00	93.75		
							Ave Q=	300.3

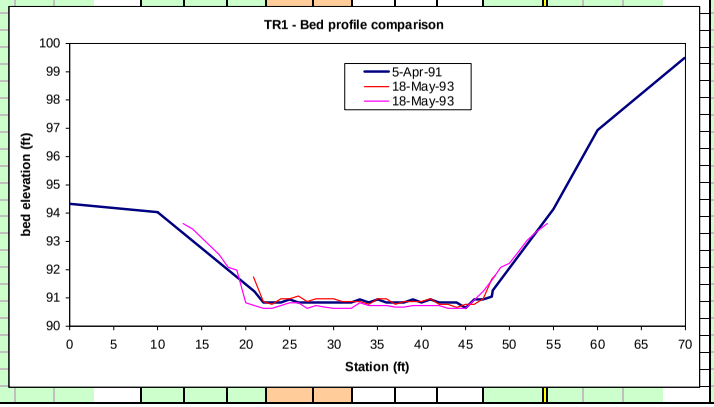
Note:

WSE slope = 0.178%

(3) Meter and propeller ID for Velocity Correction

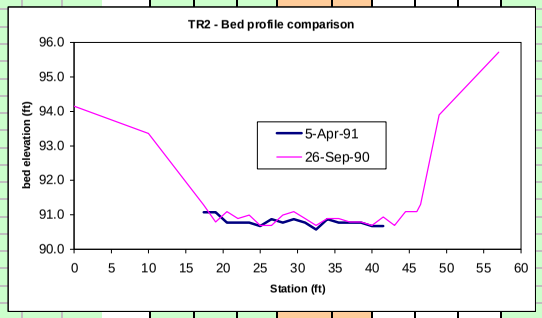
Meter ID: NA
Propeller ID: NA

Stream:	SF Sprague Riv		26-Sep-90													5-Apr-91													18-May-93														
Site:	655			Sta	FS	Ground	Depth	Vel (ft/s)					Angle	q			Sta	FS	Ground	Depth	Vel (ft/s)					Angle	q				Sta	Adj	FS	Ground	Depth	Vel (ft/s)					Angle	q	
Transect:	1			(ft)	(ft)	(ft)	(ft)	$V_{0.2/0.6}$	$V_{0.8}$	$NV_{0.2/0.6}$	$NV_{0.8}$	Ave	(deg)	(cfs)	substrate		(ft)	(ft)	(ft)	(ft)	$V_{0.2/0.6}$	$V_{0.8}$	$NV_{0.2/0.6}$	$NV_{0.8}$	Ave	(deg)	(cfs)	substrate			(ft)	(ft)		(ft)	(ft)	$V_{0.2/0.6}$	$V_{0.8}$	$NV_{0.2/0.6}$	$NV_{0.8}$	Ave	(deg)	(cfs)	substrate
Habitat:	Run																														-2.0											
			LWP	0.0	6.52	94.33									1.1																												
Survey	HI	Q		10.0	6.82	94.03									1.1	LWP	0.0	10.62	94.35									1.1	LWE	14.9	12.9		93.63	0.00								#####
Date	(ft)	(cfs)	LEW	21.0	9.62	91.23	0.00	0.00		0.00		0.00		0.00	2.6	LEW	20.9	13.23	91.74	0.10	0.00		0.00		0.00		0.00	2.2		16.0	14.0		93.43	0.20								#####
9/26/1990	100.85	8.1		22.0		90.85	0.40	0.32		0.32		0.32		0.13	2.6		22.0		90.87	0.90	0.81		0.81		0.81		0.77	2.6		17.0	15.0		93.13	0.50								#####
4/5/1991	104.97	47.3		23.0		90.85	0.40	1.22		1.22		1.22		0.49	2.6		23.0		90.77	1.00	0.94		0.94		0.94		0.94	2.6		18.0	16.0		92.83	0.80								#####
5/18/1993	104.27			24.0		90.85	0.40	0.54		0.54		0.54		0.22	2.6		24.0		90.97	0.80	1.54		1.54		1.54		1.23	2.6		19.0	17.0		92.53	1.10								#####
				25.0		90.95	0.30	0.42		0.42		0.42		0.13	2.6		25.0		90.97	0.80	0.84		0.84		0.84		0.67	2.6		20.0	18.0		92.08	1.55								#####
				26.0		90.85	0.40	0.52		0.52		0.52		0.21	2.6		26.0		91.07	0.70	2.16		2.16		2.16		1.51	2.6		21.0	19.0		91.98	1.65								#####
				27.0		90.85	0.40	0.71		0.71		0.71		0.28	2.6		27.0		90.87	0.90	2.25		2.25		2.25		2.03	2.6		22.0	20.0		90.83	2.80								#####
				28.0		90.85	0.40	1.24		1.24		1.24		0.50	2.6		28.0		90.97	0.80	1.78		1.78		1.78		1.42	2.6		23.0	21.0		90.73	2.90								#####
				29.0		90.85	0.40	0.93		0.93		0.93		0.37	2.6		29.0		90.97	0.80	1.97		1.97		1.97		1.58	2.6		24.0	22.0		90.63	3.00								#####
				30.0		90.85	0.40	1.02		1.02		1.02		0.41	2.6		30.0		90.97	0.80	2.33		2.33		2.33		1.86	2.6		25.0	23.0		90.63	3.00								#####
				31.0		90.85	0.40	0.76		0.76		0.76		0.30	2.6		31.0		90.87	0.90	2.15		2.15		2.15		1.94	2.6		26.0	24.0		90.73	2.90								#####
				32.0		90.85	0.40	0.71		0.71		0.71		0.28	2.6		32.0		90.87	0.90	1.80		1.80		1.80		1.62	2.6		27.0	25.0		90.83	2.80								#####
				33.0		90.95	0.30	1.26		1.26		1.26		0.38	2.6		33.0		90.87	0.90	1.80		1.80		1.80		1.62	2.6		28.0	26.0		90.83	2.80								#####
				34.0		90.85	0.40	0.09		0.09		0.09		0.04	2.6		34.0		90.77	1.00	2.37		2.37		2.37		2.37	2.6		29.0	27.0		90.63	3.00								#####
				35.0		90.95	0.30	1.17		1.17		1.17		0.35	2.6		35.0		90.97	0.80	2.21		2.21		2.21		1.77	2.6		30.0	28.0		90.73	2.90								#####
				36.0		90.85	0.40	0.83		0.83		0.83		0.33	2.6		36.0		90.97	0.80	2.40		2.40		2.40		1.92	2.6		31.0	29.0		90.68	2.95								#####
				37.0		90.85	0.40	0.01		0.01		0.01		0.00	2.6		37.0		90.77	1.00	2.23		2.23		2.23		2.23	2.6		32.0	30.0		90.63	3.00								#####
				38.0		90.85	0.40	1.82		1.82		1.82		0.73	4.6		38.0		90.87	0.90	1.99		1.99		1.99		1.79	4.6		33.0	31.0		90.63	3.00								#####
				39.0		90.95	0.30	1.20		1.20		1.20		0.36	4.6		39.0		90.87	0.90	1.95		1.95		1.95		1.76	4.6		34.0	32.0		90.63	3.00								#####
				40.0		90.85	0.40	0.89		0.89		0.89		0.36	4.6		40.0		90.87	0.90	2.61		2.61		2.61		2.35	4.6		35.0	33.0		90.83	2.80								#####
				41.0		90.95	0.30	0.66		0.66		0.66		0.20	4.6		41.0		90.97	0.80	2.36		2.36		2.36		1.89	4.6		36.0	34.0		90.73	2.90								#####
				42.0		90.85	0.40	1.20		1.20		1.20		0.48	4.6		42.0		90.77	1.00	2.08		2.08		2.08		2.08	4.6		37.0	35.0		90.73	2.90								#####
				43.0		90.85	0.40	0.88		0.88		0.88		0.35	2.4		43.0		90.77	1.00	2.77		2.77		2.77		2.77	2.4		38.0	36.0		90.73	2.90								#####
				44.0		90.85	0.40	0.92		0.92		0.92		0.37	2.4		44.0		90.67	1.10	2.61		2.61		2.61		2.87	2.4		39.0	37.0		90.68	2.95								#####
				45.0		90.65	0.60	1.10		1.10		1.10		0.66	2.4		45.0		90.77	1.00	2.67		2.67		2.67		2.67	2.4		40.0	38.0		90.68	2.95								#####
				46.0		90.95	0.30	0.76		0.76		0.76		0.23	2.4		46.0		90.77	1.00	2.17		2.17		2.17		2.17	2.4		41.0	39.0		90.73	2.90								#####
				47.0		90.95	0.30	0.00		0.00		0.00		0.00	2.4		47.0		90.97	0.80	1.81		1.81		1.81		1.45	2.4		42.0	40.0		90.73	2.90								#####
				48.0		91.05	0.20	0.00		0.00		0.00		0.00	2.4		48.0		91.67	0.10	0.80		0.80		0.80		0.06	2.4		43.0	41.0		90.73	2.90								#####
			LEW	48.1	9.59	91.26	0.00	0.00		0.00		0.00		0.00	2.6	REW	48.4	13.17	91.80	0.00	0.00		0.00		0.00		0.00	2.2		44.0	42.0		90.73	2.90								#####
				55.0	6.71	94.14									2.1	RWP	69.9	5.48	99.49								1.2		45.0	43.0		90.63	3.00								#####
				60.0	3.91	96.94									1.2														46.0	44.0		90.63	3.00								#####
			RWP	69.9	1.36	99.49									1.2														47.0	45.0		90.63	3.00								#####
																													48.0	46.0		90.93	2.70								#####
																													49.0	47.0		91.23	2.40								#####
																													50.0	48.0		91.63	2.00								#####
																													51.0	49.0		92.08	1.55								#####
																													52.0	50.0		92.23	1.40								#####
																													53.0	51.0		92.63	1.00								#####
																													54.0	52.0		93.03	0.60								#####
																													55.0	53.0		93.33	0.30								#####
																												REW	56.3	54.3		93.63	0.00								#####



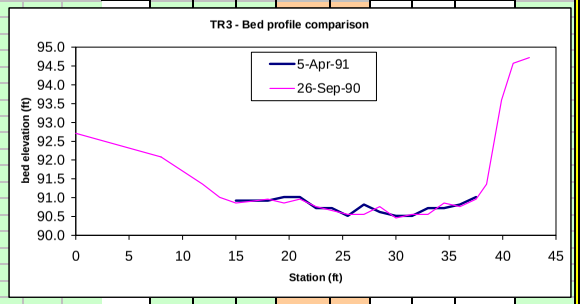
Stream:	SF Sprague Riv		26-Sep-90														5-Apr-91														18-May-93													
Site:	655			Sta	FS	Ground	Depth	Vel (ft/s)					Angle	q			Sta	FS	Ground	Depth	Vel (ft/s)					Angle	q			Sta	FS	Ground	Depth	Vel (ft/s)					Angle	q	
Transect:	2			(ft)	(ft)	(ft)	(ft)	$V_{0.2/0.6}$	$V_{0.8}$	$NV_{0.2/0.6}$	$NV_{0.8}$	Ave	(deg)	(cfs)	substrate		(ft)	(ft)	(ft)	(ft)	$V_{0.2/0.6}$	$V_{0.8}$	$NV_{0.2/0.6}$	$NV_{0.8}$	Ave	(deg)	(cfs)	substrate		(ft)	(ft)	(ft)	(ft)	$V_{0.2/0.6}$	$V_{0.8}$	$NV_{0.2/0.6}$	$NV_{0.8}$	Ave	(deg)	(cfs)	substrate
Habitat:	Run																																							
Survey	HI	Q	LWP	0.0	6.70	94.15									1.1	LWP	0.0	10.83	94.14								1.1													
Date	(ft)	(cfs)		10.0	7.49	93.36									1.1	LEW	16.1	13.20	91.77	0.10	0.00		0.00		0.00		0.00	2.2												
9/26/1990	100.85	8.5	LEW	17.4	9.57	91.28	0.20	0.00		0.00		0.00		0.00	2.5		17.4		91.08	0.70	1.60		1.60		1.60		1.62	2.5												
4/5/1991	104.97	46.4		19.0		90.79	0.50	0.42		0.42		0.42		0.33	6.2		19.0		91.08	0.70	2.20		2.20		2.20		2.39	6.2												
5/18/1993	104.27	300.3		20.5		91.09	0.20	0.09		0.09		0.09		0.03	6.2		20.5		90.78	1.00	1.59		1.59		1.59		2.39	6.2	LWE	4.2		0.00	0.00		0.00		0.00		0.00	
				22.0		90.89	0.40	0.91		0.91		0.91		0.55	6.2		22.0		90.78	1.00	1.75		1.75		1.75		2.63	6.2		7.0		0.30	0.00		0.00		0.00		0.00	
				23.5		90.99	0.30	0.22		0.22		0.22		0.10	6.2		23.5		90.78	1.00	1.90		1.90		1.90		2.85	6.2		10.0		0.80	0.48		0.48		0.48		0.96	
				25.0		90.69	0.60	0.62		0.62		0.62		0.56	6.2		25.0		90.68	1.10	1.15		1.15		1.15		1.90	6.2		12.0		1.40	1.78		1.78		1.78		4.98	
				26.5		90.69	0.60	1.11		1.11		1.11		1.00	6.2		26.5		90.88	0.90	1.90		1.90		1.90		2.57	6.2		14.0		2.10	2.25		2.25		2.25		9.45	
				28.0		90.99	0.30	0.99		0.99		0.99		0.45	6.2		28.0		90.78	1.00	2.00		2.00		2.00		3.00	6.2		16.0		3.00	3.76	2.93	3.76	2.93	3.35		20.07	
				29.5		91.09	0.20	0.87		0.87		0.87		0.26	6.2		29.5		90.88	0.90	1.98		1.98		1.98		2.67	6.2		18.0		3.10	3.92	3.82	3.92	3.82	3.87		23.99	
				31.0		90.89	0.40	0.77		0.77		0.77		0.46	6.2		31.0		90.78	1.00	1.46		1.46		1.46		2.19	6.2		20.0		3.10	4.06	4.06	4.06	4.06	4.06		25.17	
				32.5		90.69	0.60	0.10		0.10		0.10		0.09	2.6		32.5		90.58	1.20	1.76		1.76		1.76		3.17	2.6		22.0		3.10	4.45	3.45	4.45	3.45	3.95		24.49	
				34.0		90.89	0.40	0.23		0.23		0.23		0.14	2.6		34.0		90.88	0.90	1.44		1.44		1.44		1.94	2.6		24.0		3.10	4.75	4.04	4.75	4.04	4.40		27.25	
				35.5		90.89	0.40	0.85		0.85		0.85		0.51	2.4		35.5		90.78	1.00	1.86		1.86		1.86		2.79	2.4		26.0		3.20	4.91	4.17	4.91	4.17	4.54		29.06	
				37.0		90.79	0.50	0.82		0.82		0.82		0.62	2.4		37.0		90.78	1.00	1.72		1.72		1.72		2.58	2.4		28.0		3.30	5.71	3.62	5.71	3.62	4.67		30.79	
				38.5		90.79	0.50	0.63		0.63		0.63		0.47	2.4		38.5		90.78	1.00	2.04		2.04		2.04		3.06	2.4		30.0		3.50	5.03	4.52	5.03	4.52	4.78		25.07	
				40.0		90.69	0.60	1.33		1.33		1.33		1.20	2.4		40.0		90.68	1.10	1.82		1.82		1.82		3.00	2.4		31.0		3.50	4.98	3.47	4.98	3.47	4.23		14.79	
				41.5		90.94	0.35	1.30		1.30		1.30		0.68	2.4		41.5		90.68	1.10	1.12		1.12		1.12		1.85	2.4		32.0		3.50	4.70	3.71	4.70	3.71	4.21		14.72	
				43.0		90.69	0.60	1.16		1.16		1.16		1.04	2.4		43.0		90.68	1.10	1.60		1.60		1.60		2.64	2.4		33.0		3.50	4.22	2.96	4.22	2.96	3.59		12.57	
				44.5		91.09	0.20	0.00		0.00		0.00		0.00	2.2		44.5		90.98	0.80	0.94		0.94		0.94		1.13	2.2		34.0		3.50	4.26	2.46	4.26	2.46	3.36		11.76	
				46.0		91.09	0.20	0.00		0.00		0.00		0.00	2.2		46.0		91.38	0.40	0.00		0.00		0.00		0.00	2.2		35.0		3.50	4.08	2.39	4.08	2.39	3.24		11.32	
			REW	46.5	9.55	91.30	0.00	0.00		0.00		0.00		0.00	2.1	REW	46.7	13.19	91.78	0.10	0.00		0.00		0.00		0.00	2.2		36.0		3.50	2.53	2.32	2.53	2.32	2.43		8.49	
				49.0	6.95	93.90									1.1	RWP	78.0	5.57	99.40								2.2		37.0		1.40	2.91		2.91		2.91		3.06	
				57.0	5.13	95.72									1.1														37.5		1.00	2.85		2.85		2.85		2.28	
				70.0	2.57	98.28									2.2														RWE	38.6		0.00	0.00		0.00		0.00		0.00	
			RWP	78.1	1.48	99.37									2.2																								

Discharge Transect



Stream:	SF Sprague Rive		26-Sep-90													5-Apr-91													18-May-93												
Site:	655			Sta	FS	Ground	Depth	Vel (ft/s)					Angle	q			Sta	FS	Ground	Depth	Vel (ft/s)					Angle	q			Sta	FS	Ground	Depth	Vel (ft/s)					Angle	q	
Transect:	3			(ft)	(ft)	(ft)	(ft)	$V_{0.2/0.6}$	$V_{0.8}$	$NV_{0.2/0.6}$	$NV_{0.8}$	Ave	(deg)	(cfs)	substrate		(ft)	(ft)	(ft)	(ft)	$V_{0.2/0.6}$	$V_{0.8}$	$NV_{0.2/0.6}$	$NV_{0.8}$	Ave	(deg)	(cfs)	substrate		(ft)	(ft)	(ft)	(ft)	$V_{0.2/0.6}$	$V_{0.8}$	$NV_{0.2/0.6}$	$NV_{0.8}$	Ave	(deg)	(cfs)	substrate
Habitat:	Run																																							
																LWP	0.0	12.22	92.75								1.2														
Survey	HI	Q	LWP	0.0	8.13	92.71								1.2	LEW	8.2	13.04	91.93	0.00	0.00		0.00	0.00		0.00	2.2														
Date	(ft)	(cfs)		8.0	8.76	92.08								1.2		10.0		91.62	0.30	0.50		0.50	0.50		0.28	2.2														
9/26/1990	100.84		LEW	11.9	9.48	91.36	0.00	0.00		0.00		0.00		0.00	9.2		11.9		91.32	0.60	0.75		0.75	0.75		0.79	9.2														
4/5/1991	104.97	43.5		13.5		91.01	0.35	0.00		0.00		0.00		0.00	2.6		13.5		91.12	0.80	0.83		0.83	0.83		1.03	2.6														
5/18/1993	104.27			15.0		90.86	0.50	0.00		0.00		0.00		0.00	2.6		15.0		90.92	1.00	1.47		1.47	1.47		2.21	2.6														
				16.5		90.91	0.45	0.00		0.00		0.00		0.00	2.6		16.5		90.92	1.00	0.83		0.83	0.83		1.25	2.6														
				18.0		90.96	0.40							#VALUE!	6.2		18.0		90.92	1.00	1.43		1.43	1.43		2.15	6.2														
				19.5		90.86	0.50							#VALUE!	6.2		19.5		91.02	0.90	1.66		1.66	1.66		2.24	6.2														
				21.0		90.96	0.40							#VALUE!	6.2		21.0		91.02	0.90	1.53		1.53	1.53		2.07	6.2														
				22.5		90.76	0.60							#VALUE!	6.2		22.5		90.72	1.20	1.52		1.52	1.52		2.74	6.2														
				24.0		90.66	0.70							#VALUE!	6.2		24.0		90.72	1.20	1.38		1.38	1.38		2.48	6.2														
				25.5		90.56	0.80							#VALUE!	6.2		25.5		90.52	1.40	1.95		1.95	1.95		4.10	6.2														
				27.0		90.56	0.80							#VALUE!	6.2		27.0		90.82	1.10	1.73		1.73	1.73		2.85	6.2														
				28.5		90.76	0.60							#VALUE!	6.2		28.5		90.62	1.30	1.42		1.42	1.42		2.77	6.2														
				30.0		90.46	0.90							#VALUE!	6.2		30.0		90.52	1.40	1.60		1.60	1.60		3.36	6.2														
				31.5		90.56	0.80							#VALUE!	6.2		31.5		90.52	1.40	1.76		1.76	1.76		3.70	6.2														
				33.0		90.56	0.80							#VALUE!	6.2		33.0		90.72	1.20	1.88		1.88	1.88		3.38	6.2														
				34.5		90.86	0.50							#VALUE!	6.2		34.5		90.72	1.20	1.79		1.79	1.79		3.22	6.2														
				36.0		90.76	0.60							#VALUE!	2.2		36.0		90.82	1.10	1.46		1.46	1.46		2.41	2.2														
				37.5		90.96	0.40							#VALUE!	2.2		37.5		91.02	0.90	0.47		0.47	0.47		0.42	2.2														
			REW	38.5	9.48	91.36	0.00	0.00		0.00		0.00		0.00	2.2		38.0		91.42	0.50	0.27		0.27	0.27		0.10	2.2														
				39.9	7.25	93.59									1.1		39.0		91.82	0.10	0.00		0.00	0.00		0.00	2.2														
				41.0	6.27	94.57									1.1	REW	39.3	13.06	91.91	0.10	0.00		0.00	0.00		0.00	2.2														
			RWP	42.5	6.12	94.72									1.1	RWP	42.3	10.22	94.75								1.1														

velocity meter broke.



```
        SF Sprague R. SP15 04/05/91
Run                          MID                                    TRANSECT 1
IOC       1101100000001000101000
QARD   5.0
QARD   8.3
QARD  10.0
QARD  15.0
QARD  20.0
QARD  25.0
QARD  30.0
QARD  35.0
QARD  40.0
QARD  45.2
QARD  50.0
QARD  60.0
QARD  70.0
QARD  80.0
QARD  90.0
QARD 100.0
QARD 110.0
QARD 120.0
QARD 130.0
QARD 140.0
QARD 150.0
QARD 160.0
QARD 170.0
QARD 180.0
QARD 200.0
QARD 220.0
QARD 240.0
QARD 260.0
QARD 280.0
QARD 300.3
XSEC   0.0       0.0 1.0    90.95  0.00168
       0.0  0.094.33 10.094.03 20.991.73 22.090.86 23.090.76 24.090.96
       0.0 25.090.96 26.091.06 27.090.86 28.090.96 29.090.96 30.090.96
       0.0 31.090.86 32.090.86 33.090.86 34.090.76 35.090.96 36.090.96
       0.0 37.090.76 38.090.86 39.090.86 40.090.86 41.090.96 42.090.76
       0.0 43.090.76 44.090.66 45.090.76 46.090.76 47.090.96 48.091.66
       0.0 48.491.79 55.094.14 60.096.94 69.999.49
NS     0.0       1.1       1.1 0.07  2.2       2.6       2.6       2.6
NS     0.0       2.6       2.6       2.6       2.6       2.6       2.6
NS     0.0       2.6       2.6       2.6       2.6       2.6       2.6
NS     0.0       2.6       4.6       4.6       4.6       4.6       4.6
NS     0.0       2.4       2.4       2.4       2.4       2.4 .018  2.4
NS     0.0 .02   2.2       2.1       1.2       1.2
CAL1   0.0     91.76      45.2
VEL1   0.0          0.001 0.81 0.94 1.54 0.84 2.16 2.25 1.78 1.97 2.33
VEL1   0.0 2.15 1.80 1.80 2.37 2.21 2.40 2.23 1.99 1.95 2.61 2.36 2.08
VEL1   0.0 2.77 2.61 2.67 2.17 1.81 0.80 0.00
CAL2   0.0     91.25       8.3
VEL2   0.0
VEL2   0.0
VEL2   0.0
CAL3   0.0     93.63     300.3
VEL3   0.0
VEL3   0.0
VEL3   0.0
ENDJ
```

```
        SF Sprague R. SP15 04/05/91
Run                          MID                                    TRANSECT 2
IOC       11011001000010001010000
QARD   5.0
QARD   8.3
QARD  10.0
QARD  15.0
QARD  20.0
QARD  25.0
QARD  30.0
QARD  35.0
QARD  40.0
QARD  45.2
QARD  50.0
QARD  60.0
QARD  70.0
QARD  80.0
QARD  90.0
QARD 100.0
QARD 110.0
QARD 120.0
QARD 130.0
QARD 140.0
QARD 150.0
QARD 160.0
QARD 170.0
QARD 180.0
QARD 200.0
QARD 220.0
QARD 240.0
QARD 260.0
QARD 280.0
QARD 300.3
XSEC   0.0       0.0 1.0    90.99  0.00168
       0.0  0.094.15 10.093.36 16.191.76 17.491.07 19.091.07 20.590.77
       0.0 22.090.77 23.590.77 25.090.67 26.590.87 28.090.77 29.590.87
       0.0 31.090.77 32.590.57 34.090.87 35.590.77 37.090.77 38.590.77
       0.0 40.090.77 41.590.67 43.090.67 44.590.97 46.091.37 46.791.77
       0.0 49.093.90 57.095.72 70.098.28 78.199.37
NS     0.0       1.1 .07   1.1 .05   2.2       2.5 .027  6.2       6.2
NS     0.0       6.2       6.2       6.2       6.2       6.2       6.2
NS     0.0       6.2       2.6 .065  2.6       2.4       2.4       2.4
NS     0.0       2.4       2.4       2.4       2.2 .12   2.2 .15   2.2
NS     0.0       1.1       1.1       2.2       2.2
WSL    0.0     91.19     91.28     91.31     91.40     91.49     91.56
WSL    0.0     91.64     91.70     91.76     91.82     91.88     91.98
WSL    0.0     92.09     92.18     92.27     92.35     92.43     92.52
WSL    0.0     92.60     92.67     92.74     92.81     92.88     92.95
WSL    0.0     93.07     93.20     93.32     93.43     93.55     93.66
CAL1   0.0     91.77      45.2
VEL1   0.0          0.001 1.60 2.20 1.59 1.75 1.90 1.15 1.90 2.00 1.98
VEL1   0.0 1.46 1.76 0.44 1.86 1.72 2.04 1.82 1.12 1.60 0.940.0010.001
VEL1   0.0
CAL2   0.0     91.29       8.3
VEL2   0.0
VEL2   0.0
VEL2   0.0
CAL3   0.0     93.76     300.3
VEL3   0.0
VEL3   0.0
VEL3   0.0
ENDJ
```

```
        SF Sprague R. SP15 04/05/91
Run                          MID                                    TRANSECT 3
IOC       11011001000010001010000
QARD   5.0
QARD   8.3
QARD  10.0
QARD  15.0
QARD  20.0
QARD  25.0
QARD  30.0
QARD  35.0
QARD  40.0
QARD  45.2
QARD  50.0
QARD  60.0
QARD  70.0
QARD  80.0
QARD  90.0
QARD 100.0
QARD 110.0
QARD 120.0
QARD 130.0
QARD 140.0
QARD 150.0
QARD 160.0
QARD 170.0
QARD 180.0
QARD 200.0
QARD 220.0
QARD 240.0
QARD 260.0
QARD 280.0
QARD 300.3
XSEC   0.0       0.0 1.0    90.99  0.00168
       0.0  0.092.71  8.092.08  8.291.93 10.091.62 11.991.32 13.591.12
       0.0 15.090.92 16.590.92 18.090.92 19.591.02 21.091.02 22.590.72
       0.0 24.090.72 25.590.52 27.090.82 28.590.62 30.090.52 31.590.52
       0.0 33.090.72 34.590.72 36.090.82 37.591.02 38.091.42 39.091.82
       0.0 39.391.91 42.394.75 42.594.72
NS     0.0 .1    1.2 .06   1.2       2.2       2.2       9.2       2.6
NS     0.0       2.6 .065  2.6       6.2       6.2       6.2       6.2
NS     0.0       6.2       6.2       6.2       6.2       6.2       6.2
NS     0.0       6.2       6.2       2.2 .08   2.2 .10   2.2 .12   2.2
NS     0.0 .16   2.2       1.1       1.1
WSL    0.0     91.26     91.36     91.39     91.49     91.58     91.66
WSL    0.0     91.73     91.79     91.86     91.92     91.98     92.08
WSL    0.0     92.19     92.28     92.37     92.46     92.54     92.62
WSL    0.0     92.70     92.77     92.85     92.92     92.99     93.06
WSL    0.0     93.18     93.31     93.43     93.55     93.67     93.78
CAL1   0.0     91.92      45.2
VEL1   0.0           0.00 0.50 0.75 0.83 1.47 0.83 1.43 1.66 1.53 1.52
VEL1   0.0 1.38 1.95 1.73 1.42 1.60 1.76 1.88 1.79 1.46 0.47 0.270.001
VEL1   0.0 0.00
CAL2   0.0     91.36       8.3
VEL2   0.0
VEL2   0.0
VEL2   0.0
CAL3   0.0     93.80     300.3
VEL3   0.0
VEL3   0.0
VEL3   0.0
ENDJ
```